

# The Surprising Effects of Loneliness on Health

## Personal Health

By JANE E. BRODY, DEC. 11, 2017



Credit Paul Rogers

The potentially harmful effects of loneliness and social isolation on health and longevity, especially among older adults, are well established. For example, in 2013 I reported on research finding that loneliness can impair health by raising levels of stress hormones and inflammation, which in turn can increase the risk of heart disease, arthritis, Type 2 diabetes, dementia and even suicide attempts.

Among older people who reported they felt left out, isolated or lacked companionship, the ability to perform daily activities like bathing, grooming and preparing meals declined and deaths increased over a six-year study period relative to people who reported none of these feelings. Writing for The New York Times's department The Upshot last December, Dr. Dhruv Khullar, a physician and researcher at Weill Cornell Medicine in New York, cited evidence for disrupted sleep, abnormal immune responses and accelerated cognitive decline among socially isolated individuals, which he called "a growing epidemic."

As research moves forward on these topics, scientists are gaining a more refined understanding of the effects of loneliness and isolation on health. They are also looking into factors such as who is likely to be most seriously affected, and what kinds of interventions may reduce the associated risks.

There are some surprising findings. First, though equivalent in risk, loneliness and social isolation don't necessarily go hand-in-hand, Julianne Holt-Lunstad and Timothy B. Smith, psychologist-researchers at Brigham Young University, have pointed out.

"Social isolation denotes few social connections or interactions, whereas loneliness involves the subjective perception of isolation — the discrepancy between one's desired and actual level of social connection," they wrote in the journal *Heart* last year.

Perhaps equally surprising is the finding that older adults are not necessarily the loneliest among us. Although most studies of the effects of loneliness have looked only at older people, Dr. Holt-Lunstad, who with colleagues has analyzed 70 studies encompassing 3.4 million people, said that the prevalence of loneliness peaks in adolescents and young adults, then again in the oldest old.

According to Louise Hawkley, senior research scientist at the National Opinion Research Center at the University of Chicago, “If anything, the intensity of loneliness decreases from young adulthood through middle age and doesn’t become intense again until the oldest old age.” Only 30 percent of older adults feel lonely fairly often, according to data from the National Social Life, Health and Aging Project.

“We found stronger risks for those under 65 than for those over 65,” Dr. Holt-Lunstad said. “Older adults should not be the sole focus of the effects of loneliness and social isolation. We need to address this for all ages.”

Furthermore, she said, while it is not certain whether loneliness or social isolation has the stronger effect on health and longevity, “if we recognize social connections as a fundamental human need, then we can’t discount the risks of being socially isolated even if people don’t feel lonely.”

Equally intriguing is a recent finding suggesting that loneliness may be a preclinical sign for Alzheimer’s disease. Using data from the Harvard Aging Brain Study of 79 cognitively normal adults living in the community, Dr. Donovan and colleagues found a link between the participants’ score on a three-question assessment for loneliness and the amount of amyloid in their brains. Amyloid accumulation is considered a main pathological sign of Alzheimer’s disease.

In this study, loneliness was not associated with the extent of people’s social network or social activity or even with their socioeconomic status. However, in another study of adults 50 and older, published earlier this year in the *International Journal of Geriatric Psychiatry*, Dr. Donovan and co-authors reported that loneliness was linked to worsening cognitive function over a 12-year period, whereas initially poor cognitive function did not lead to increased loneliness.

When the researchers examined their findings more closely, they discovered that depression, even relatively mild depression, had a greater effect than loneliness on the risk of cognitive decline.

“There is now strong evidence relating greater depressive symptoms to increased progression from normal cognition to mild cognitive impairment and from mild cognitive impairment to dementia,” Dr. Donovan and colleagues reported, citing their findings and those of others. They suggested

that loneliness as well as low-grade and more serious depression may have similar pathological effects on the brain.

All of which raises the question of how loneliness and social isolation might be countered to help ward off cognitive decline and other adverse health effects.

Suggestions for lonely or socially isolated adults have included taking a class, getting a dog, doing volunteer work and joining a senior center. A British program, called Befriending, involves one-on-one companionship by a volunteer who meets regularly with a lonely person. While such programs may show modest improvement on measures of depression and anxiety, their long-term significance is unknown. In a study of 14 trials of befriending, no significant benefit overall was found on measures of depression, quality of life, degree of loneliness, self-esteem and well-being.

Another program called LISTEN, developed by Laurie Theeke at the School of Nursing at West Virginia University, is a form of cognitive behavioral therapy to counter loneliness. It entails five two-hour sessions of small groups of lonely people who explore what they want from relationships, their needs, thought patterns and behaviors.

It is doubtful, however, that such an approach would be practical on a scale large enough to meet the need for cognitive restructuring of lonely adults nationwide.

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